

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Claim 3 has been canceled and claims 2, 4, 9, 12, 13, 17, 32, and 34 have been amended herein.

Listing of Claims:

1. (Cancelled)
2. (Currently amended) A communication unit in a cellular communication system, the unit comprising:

a transmitter that transmits a data packet over an RF link, the data packet includes a first portion that is transmitted at a first data rate and a second portion that is transmitted at a second data rate that is not equal to the first data rate; and

a power control module coupled to the transmitter, the power control module receives a data packet having a first portion and a second portion and transmits the first portion at a first transmission power and the second portion at a second transmission power, the communication unit transmits the first portion of the data packet at a first data rate and the second portion of the data packet at a second data rate

a power control module that receives the data packet and that determines a first transmission power for the first portion and a second transmission power for the second portion such that the first portion and the second portion when transmitted at disparate data rates will achieve a uniform transmission range.
3. (Canceled)
4. (Currently amended) The unit of claim 2, the data packet includes a third portion and the power adjustment control module determines a third transmission power for receives the data packet having the third portion and transmits the third portion at a third transmission power based upon the uniform transmission range.

5. (Previously presented) The unit of claim 4, the communication unit transmits the first portion of the data packet at a first data rate, the second portion of the data packet at a second data rate and the third portion of the data packet at a third data rate.
6. (Previously presented) The unit of claim 5, the data packet conforms to the IEEE 802.11 standard protocol and the first portion of the data packet is a PLCP preamble, the second portion of the data packet is a PLCP header and the third portion of the data packet is a data portion.
7. (Previously presented) The unit of claim 2, the communication unit is an access point system.
8. (Previously presented) The unit of claim 2, the communication unit is a mobile communication unit.
9. (Currently amended) The unit of claim 2, the power control module includes a transmission power amplifier adapted to receive the ~~power~~ data packet and dynamically control the transmission power of the first portion and the second portion.
10. (Previously presented) The unit of claim 9, the power control module includes a D/A converter that receives power data information in digital format and that converts the power data information to an analog control signal, the analog signal controls the transmission power of the transmission power amplifier.
11. (Previously presented) The unit of claim 10, further including a processor coupled to the D/A converter, the processor transmits the power data information to the D/A converter.

12. (Currently amended) The unit of claim 11, further including a receiver coupled to the processor, the receiver receives a transmission from another communication units unit.

13. (Currently amended) The unit of claim 12, the receiver provides transmission power information to the processor from a transmission communication unit transmitting information to the receiver, the processor evaluating evaluates a range from the transmission power information and downloading downloads power data information to the power control circuit based on a-desired the uniform transmission range of the data packet.

14. (Previously presented) The unit of claim 10, the power control module includes a power data register section coupled to the D/A converter, the power data register module stores the power data information and provides the power data information to the D/A converter.

15. (Previously presented) The unit of claim 14, further including a processor coupled to the power data register section, the processor transmits the power data information to the power data register section.

16. (Previously presented) The unit of claim 15, further including a receiver coupled to the processor, the receiver receives a transmission from other communication units.

17. (Currently amended) The unit of claim 16, the receiver provides transmission power information to the processor from a transmission communication unit transmitting information to the receiver, the processor evaluates a range from the transmission power information and downloads power data information to the power control circuit based on a-desired the uniform transmission range of the data packet.

18. (Previously presented) The unit of claim 2, the communication unit is coupled to a network and the network provides the power control circuit with information relating to the power transmission level of the first portion and the second portion.

19. (Cancelled)

20. (Previously presented) A method of transmitting a data packet in a cellular communication system, comprising:

transmitting a first portion of the data packet at a first transmission power level;
transmitting a second portion of the data packet at a second transmission power level; and

transmitting a third portion of the data packet at a third transmission power level.

21. (Previously presented) The method of claim 20, the first portion of the data packet is transmitted at a first data rate and the second portion of the data packet is transmitted at a second data rate.

22. (Previously presented) The method of claim 20, the first power level and the second power level are adjusted so that the first portion and the second portion have essentially the same transmission range.

23. (Previously presented) The method of claim 20, further comprising providing a communication unit prior to transmitting a first portion of the data packet at a first transmission power level, the communication unit including a transmitter, a power control module coupled to the transmitter, a processor coupled to the power control module and a receiver coupled to the processor.

24. (Previously presented) The method of claim 23, the processor provides the power control module with the first transmission power and the second transmission power after providing a communication unit and prior to transmitting a first portion of the data packet at a first transmission power level.

25. (Previously presented) The method of claim 24, the processor evaluates the first transmission power and the second transmission power based on a desired transmission range for the first portion and the second portion of the data packet.
26. (Previously presented) The method of claim 25, the processor evaluates the first transmission power and the second transmission power based on a desired transmission range for the first portion and the second portion of the data packet based on a transmission power level of a transmission received from another mobile communication unit.
27. (Previously presented) The method of claim 25, the communication unit is coupled to a network and the processor evaluates the first transmission power and the second transmission power based on a desired transmission range for the first portion and the second portion of the data packet, the network providing the processor information relating to the desired transmission range.
28. (Previously presented) The method of claim 20, the power level of the first portion and the second portion is dynamically adjusted during the transmission of the data packet.

29. (Previously presented) An access point system in a cellular communication system utilizing an IEEE 802.11 standard protocol, comprising:

- a transmitter that transmits data over an RF link;
- a power control module coupled to the transmitter, the power control module receives a data packet having a PLCP preamble and PLCP header portion and a data portion and dynamically adjusts the transmission power of the packet during transmission of the packet, such that the PLCP preamble portion begins transmitting at a first transmission power level and the data portion begins transmitting at a second transmission power level, the dynamic adjustment of transmission power made to facilitate transmitting the PLCP preamble and the data portion over a substantially similar transmission range;
- a processor coupled to the power adjustment module, the processor provides power adjustment information to the power control module; and

a receiver coupled to the processor, the receiver receives data over an RF link, the access point system is coupled to a network.

30. (Previously presented) The system of claim 29, the power control module includes a transmission power amplifier that receives the data packet and control the transmission power of the PLCP preamble portion and the data portion, the transmission power amplifier coupled to a D/A converter, the D/A converter receives power data information in digital format and converts the power data information to an analog control signal, the analog control signal controls the transmission power of the transmission power amplifier.

31. (Previously presented) The system of claim 30, the power control module includes a power data register module coupled to the D/A converter, the power data register stores the power data information and provides the power data information to the D/A converter, the processor is coupled to the D/A converter, the processor transmits the power data information to the D/A converter.

32. (Currently amended) A cellular communication system, comprising:
means for transmitting a data packet having a first portion and a second portion;
means for dynamically adjusting [[the]] a transmission power level of the first portion with respect to the second portion of the data packet coupled to the means for transmitting a data packet having a first portion and a second portion; and
means for determining the transmission power levels level of the first and second portion, whereby each portion is to be transmitted at a disparate data rate, the transmission power level is determined in order to match based on a desired transmission range for both the first and second portion.

33. (Cancelled)

34. (Currently amended) The system of claim 32, the means for dynamically adjusting the transmission power level of the first portion with respect to the second portion of the data packet further provides for adjusting the power transmission level of a third portion of the data packet with respect to the first and second portions, in order to match the desired transmission range.

35. (Previously presented) A signal transmitted over a wireless communication system, the signal comprising:

a data packet having a first portion transmitted at a first power level, a second portion transmitted at a second power level, and a third portion transmitted at a third power level.